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REMARKS

Reconsideration of the above-identified patent application in view of the amendments above and the remarks following is respectfully requested.

Claims 1-37 are in this case. Claims 15-37 were withdrawn by the Examiner from consideration as drawn to a non-elected invention. Claims 1-13 have been rejected under § 102(b). Claim 14 has been rejected under § 103(a). Claim 12 has been canceled. Independent claim 1 and dependent claim 2 have been amended. New claim 38 has been added.

The claims before the Examiner are directed toward a window assembly that includes an outer window and an inner window that are mounted in a housing so as to form an intervening space therebetween. The intervening space is occupied by a coolant that is cooled by an appropriate mechanism. At least one of window surfaces is coated with an optical coating that passes visible and/or infrared light but blocks radio and radar frequencies. Preferably, only the inner surface of the inner window is so coated.

Objections to the Claims

The Examiner has objected to certain informalities in the claims. These informalities are the result of element (c) of claim 1 being moved to between the third and fourth lines of claim 2 by a bug-ridden word processing program. The correct structure of claim 1 is the structure of the summary paragraph on page 5 lines 2-6 of the specification. Claims 1 and 2 have been amended to correct this inadvertent error.

With element (c) of claim 1 in its proper place, the limitation "said intervening space" in claims 9, 10 and 12 now has antecedent basis.

§ 102(b) Rejections – Fisher ‘612

The Examiner has rejected claims 1-13 under § 102(b) as being anticipated by Fisher, US Patent No. 5,776,612 (henceforth, “Fisher ‘612”). The Examiner’s rejection is respectfully traversed.

Claim 12 has been canceled, thereby rendering moot the Examiner’s rejection of this claim.

Fisher ‘612 teaches several embodiments of a window that is transparent to infrared light and/or visible light and that is opaque to microwaves. The window includes two transparent dielectric or semiconducting layers 40 and 42. Either or both surfaces of either or both layers may be covered with electrical conductors such as grids of electrical conductors or transparent layers of electrical conductors. The embodiment of Figure 6 has an air gap 70 between layers 40 and 42.

The crucial difference between the window assembly of the present invention and the window of Figure 6 of Fisher ‘612 is that the window assembly of the present invention includes both a coolant in the intervening space between the outer and inner window and a mechanism for cooling the coolant. Arguably, the air in air gap 70 of the window of Figure 6 of Fisher ‘612 could be construed as a coolant; but there is no mention in Fisher ‘612 of a mechanism for cooling that air. Therefore, the present invention is not anticipated by Fisher ‘612.

Furthermore, the present invention is not even obvious from Fisher ‘612. There is neither a hint nor a suggestion in Fisher ‘612 of either a mechanism for cooling the air in air gap 70 or of any need for such cooling. In fact, Fisher ‘612 teaches against such cooling, insofar as Fisher 612 teaches the use of the conductive grids and layers and even of the transparent layers themselves for resistive heating of the windows of Fisher ‘612. See, for example, column 5 lines 39-47:

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In some other embodiments, a conductive layer is provided on the inwardly facing side of the second layer 40 to serve as a heater for the window when an electrical current is passed therethrough, and to provide sufficient electrical conductivity at the surface. No such conductive layer is required on the embodiment of FIG. 2, as the semiconductor material of the first layer is sufficiently electrically conductive, from about 1 to about 50 ohm-cm, to pass a current and act as a heater. (emphasis added)

While continuing to traverse the Examiner's rejections, Applicant has, in order to expedite the prosecution, chosen to amend independent claim 1 in order to clarify and emphasize the crucial distinctions between the window assembly of the present invention and the windows of Fisher '612. Specifically, independent claim 1 has been amended to include the limitation of claim 12, that the intervening space is occupied by a coolant, and also the limitation that the window assembly of the present invention includes a mechanism for cooling the coolant.

Support for these amendments can be found in the specification. Specifically, support for the presence of the coolant in the intervening space can be found in claim 12 as filed; and support for the mechanism for cooling the coolant can be found in Figure 4 and the accompanying text, in the form of pump 54 and refrigerator 56.

Amended independent claim 1 now features language which makes it absolutely clear that the window assembly of the present invention includes both a coolant in the intervening space and a mechanism for cooling the coolant. Applicant believes that the amendment of the claims completely overcomes the Examiner's rejections on § 102(b) grounds.

With independent claim 1 now in condition for allowance, it follows that claims 2-11 and 13, that depend therefrom, also are in condition for allowance.

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§ 103(a) Rejections – Fisher ‘612 in view of Fisher ‘699

The Examiner has rejected claim 14 under § 102(b) as being anticipated by Fisher ‘612 in view of Fisher, US Patent No. 6,028,699. The Examiner’s rejection is respectfully traversed.

It is demonstrated above that independent claim 1 is allowable in its present form. It follows that claim 14, that depends therefrom, also is allowable in its present form.

New Claim

New dependent claim 38 has been added.

New claim 38 adds to claim 3 the limitation that only the inner surface of the inner window is covered with the optical coating. Support for new claim 38 is found in the specification in Figure 2, that shows optical coating 38 only on inner surface 28 of inner window/dome 24. The other surfaces are covered by anti-reflective coatings 36.

Amendments to the Specification

Inadvertent typographical errors have been corrected on page 5 line 7 and on page 10 line 18.

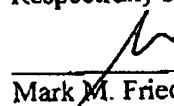
On page 13 line 12, the reference numeral “46” has been changed to bold typeface for stylistic consistency.

No new matter has been added.

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In view of the above amendments and remarks it is respectfully submitted that independent claim 1, and hence dependent claims 2-11, 13, 14 and 38 are in condition for allowance. Prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,



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